

AUTOMOTIVE
SECTION

Some Suggestions That May Fit Your Auto Troubles

AUTOMOTIVE
SECTIONSOME CURES FOR
AUTO ANNOYANCESW. E. Schaaff Gives Sug-
gestions That May Fit Your
Car Troubles.By W. E. SCHAFF,
In American Motorist.

Now and then the owner is sorely troubled by a mysterious popping of his motor which makes its appearance particularly when he drives with a wide open throttle. If the popping disappears when the accelerator pedal is released for a while it is an almost certain indication that something is wrong in the vacuum tank. If the car has been idle for some

time and the vacuum tank drained, the flapper valve, being dry, may refuse to seat properly. Before dismantling the tank, unscrew the plug in the top of the tank and introduce as small quantity—a half pint or so of gasoline; this will moisten the valve, wash off sediment and secure a better seat. Should the tank refuse to function after this is done, disconnect the pipe leading to the carburetor and drain the vacuum tank. Hold a finger over this tube and over the vent opening. If a continuous suction is felt through either tube when the engine is operated or turned over with the throttle closed this may be taken as an indication that the flapper valve is not closing properly and that air is admitted from the reservoir to the upper vacuum chamber through the flapper valve.

To clean the valve, remove the inner chamber by taking out the retaining screws and after removing the vacuum chamber and head remove the flapper valve by taking out two small retaining screws and spaces. Hold the flapper valve on

one finger of your open hand and remove any collection of dirt that may be on the surface of the valve with a very smooth flat file—a spark plug file will do. Do not use sand paper or emery cloth since this has a tendency to make the seat uneven. With very light pressure on the valve the file should be pushed across it in one direction, the valve being turned through a fraction of a turn and the operation repeated.

If there is any collection of dirt on the seat on which the flapper valve closes this also should be removed with a file in the same manner, but extreme care should be used to leave the surface perfectly flat and smooth. Flooding of the vacuum tank will result from a leaky float. This causes excessive gasoline consumption and loading of the engine at nearly any speed. To locate leaks in the float, immerse it in hot water. Bubbles will indicate the escape of air. Punch a hole in top and bottom of the float and drain out all gasoline and water and solder up the openings made as well as the original leak. Do not use an excessive amount of solder, and that would increase the weight of the float and disturb the operation. Test the float after soldering it.

Particular care should be taken to see that the cork gaskets at the top of the tank are not damaged on removal of the head of vacuum chamber. These gaskets are put on with shellac before being replaced. If they are broken new gaskets should be secured.

It is a good plan to clean the vacuum tank periodically by introducing gasoline through the plug at the top after disconnecting the gasoline line to the carburetor. This will flush out any sediment that may have collected in the bottom.

A seized piston can be a trouble-

some item, particularly if it occurs where and when the motorist is unable to secure help in extricating himself from the difficulty. The first thing to do is to make certain that the tightness is not in some other part of the car, as the differential or the transmission. Thus, as a matter of precaution, the rear wheels should be jacked up and both wheels turned while the transmission is in neutral and the emergency brake disengaged. If the wheels turn freely the indications are that there is a seized piston. It is assumed, of course, that every other reasonable means has been tried, such as starting the engine by means of the electric starter re-enforced by a man at the crank handle.

If all attempts at securing a start have been unsuccessful as far as this the spark plugs should be removed

or the pet cocks opened and a liberal quantity of kerosene poured into all cylinders, since it is not likely to ignite in which cylinder the seizure has occurred. By this time an accommodating brother motorist should be hailed and induced to tow the incapacitated car a little distance—a hundred or two hundred feet—using your tire chains if no tow rope is available. When the car is well under way the transmission should be slipped in "high" and the clutch engaged in such a way that it slips to some little extent; this slipping is rather important since it prevents more serious mishap likely to occur should the offending piston refuse to budge altogether.

After the engine has started under its own power it should be stopped and turned over a number of times by hand. Then, if the kerosene supply has been liberal it is a good plan to drain the crank case and pour in new oil. The motor should be run carefully and slowly until the new oil has had time to reach the pistons and cylinder walls.

There are a number of causes which contribute to power losses in an engine and not the least of them is a partially stopped up or clogged muffler. It is natural that the often narrow and tortuous passages of the muffler should be choked with carbon after a year's use. Very often a remarkable improvement in engine efficiency is secured with no greater trouble than a temporary cleaning of the muffler which should be beating with a wooden mallet or a piece of wood; this will loosen the worst accumulations which will then be blown out through the tail pipe. If the car is equipped with a muffler cut-out and there is a noticeable difference in power when the cut-out is closed and open, a cleaning of the muffler, as indicated, should be undertaken at once.

One reason why carburetor adjustments made by the owner, now and then, don't seem to "stick" is that too often such adjustments are made before the engine is well warmed up. Always make it a point to get your motor about as warm as it would be in a run of several miles.

HOW TO HEAR HEART
BEATS OF YOUR MOTOR

It is not a very difficult matter to construct an instrument that will enable the owner to listen to the very heart beats of his motor and find out what ails it. One way is to secure a stethoscope such as is used by physicians in listening to the beating of the patient's heart and the working of his breathing apparatus. This may be made suitable to the purpose by lengthening the central tube. The other end of the device may then be held against any part of the motor without the necessity of removing the receivers from the ears.

Another scheme is to secure from the junk man or local telephone company a telephone receiver body into the closed end of which is screwed a steel rod 3-16 inch in diameter and about 15 inches long. The rod should be threaded for about 1½ inches from one end and a nut and lock washer should be used on each side of the receiver so as to hold the steel rod securely in place. When the rod is held against the engine and the receiver to the ear all sounds in the motor are "telegraphed" up the rod so that each bearing or wristpin knock stands out clearly above the noise of the operating parts of the motor.—American Motorist.

EXPECT DODGE CITY
RACE TO SET RECORDS

Dirt track motorcycle records are expected to be broken on July 3, when a galaxy of stars will compete for premier honors on the two-mile saucer track at Dodge City, Kan., in a revival of the famous 300-mile championship event that was discontinued in 1916. Two dozen famous riders, including Gene Walker, Fred Ludlow, Roy Arley, "Shrimp" Burns, Bob Newman and Otto Walker will try to break the mark of eighty-five miles an hour set for the distance. With new machines a speed of ninety miles an hour is anticipated.

Interest is at fever heat, and it is expected 35,000 motorcycle fans will be in attendance when the starting gun is fired.

NEW HEALTH TRUCK.

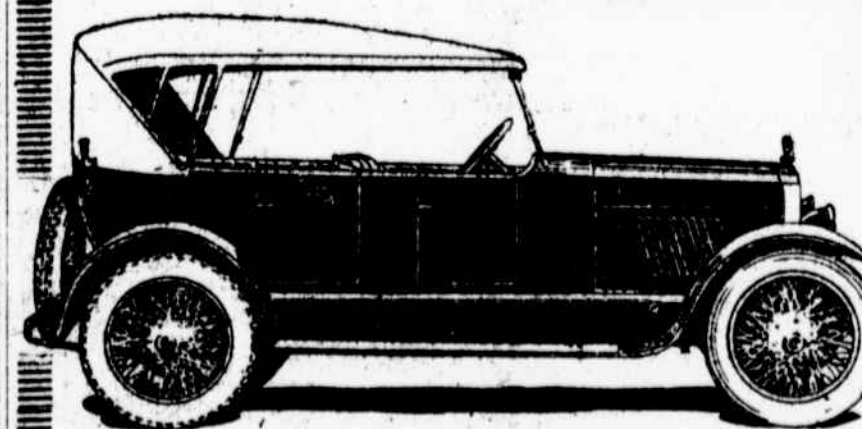
New York State has a "Healthmobile," a large motor truck designed to carry educational health campaigns into isolated rural districts. The car carries an electric storage battery equipment and a large motion picture machine.

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HENDRICK MOTOR CO.

VOGUE—LORRAINE—JONES
2424 Eighteenth Street N. W.ELEVATED ROAD FOR
AUTOS SUGGESTEDWould Relieve Rush Hour Con-
gestion in Big Cities, Says
Motor Man.

An elevated automobile highway to relieve the traffic congestion of growing automobile centers is advocated by Fred Swindell, of the Tri-State Motor Co., Maibohm distributors in Washington.

"Such an elevated highway," observes Swindell, "is not to be considered as a substitute for rapid transit, that is, a subway—its purpose is to take from the congested districts in the rush hour a large proportion of the automobiles which attempt to travel the main arteries, and thus save time for the motorist, delay and injury to the pedestrian, and at the same time increase the efficiency of the street below for the use of surface cars and trucks."

"The citizen who is compelled to stand in a crowd while lines of automobiles whiz by could not be confronted with this difficulty if a good sharp of the passenger cars were overlaid on a side street. No ordinance would be required to divert the passenger cars to this highway, once driven learned that they could proceed with a reasonable rate of speed and with freedom from starting and stopping annoyances."

"A highway of this nature, say 25 feet in width, would make it possible for three passenger cars to travel abreast. It could be widened somewhat at regular intervals to provide a stopping place for bus lines to entrain and discharge passengers without interfering with through traffic. Approaches to the highway would be at right angles to it, and at regular intervals along its entire length. The approaches would lead by easy grades down to the center and level of the cross streets. Loops could connect main elevated highways and give convenient access to overhead parking areas."

"By permitting traffic to go only toward the center of the business district during the rush hours of the morning, and by reversing the allowable direction in the late afternoon, a relatively high rate of speed could be maintained and danger of collision minimized."

"An investigation of the cost of such a highway by the Maibohm Motors Company shows that a structure of re-enforced concrete paved with a noiseless and dustless surface, artistically modeled on the plan of the elevated railways of Berlin, would cost only \$300,000 a mile, and it would add materially to the beauty of any city."

SIXTY DIMMERS PASS.

Of the 700 different dimming devices for headlights tested by the New Jersey motor vehicles department, only sixty have been passed by the commissioner.

BANKERS NOW HELP
PEOPLE BUY CARS

The question of deferred payments in the purchase of motor vehicles is discussed at length by John Chapman Hilder in the May issue of MoToR. Most of us remember when this practice was frowned upon by the solid financial interests. "If any proof were needed today that the automobile has passed out of the luxury

class into the necessity class," says Mr. Hilder, "it could be found in the very definitely changed attitude of bankers throughout the country, who now not alone approve of a man's buying a car, but actually help him to buy it."

TOKYO A MOTOR CENTER.

Tokyo is the center of motordom in Japan. Automobiles are usually imported by agents there and distributed thence over the country.

DUTY ON CARS IN JAPAN.

Tourists with automobiles may enter Japan by paying the required import duty with the understanding that it will be refunded if the car is re-exported by the owner within three months.

TRACTOR REPLACES HORSE. Motor trucks and tractors have replaced horses on more than fifty farms in Kansas.

A message from
Headquarters

GOOD NEWS!

YES, great news, for we have received word from our headquarters in New York granting us permission to continue our sensational One-Dollar Sale of Tires over the Fourth of July holidays.

BUY EXTRA TIRES FOR
YOUR 4th OF JULY TRIP

Buy them now, when you can save money, and do away with the possibility of marring the pleasure of your outing with defective or insufficient tires and tubes. Read on:

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Every one of these tires carries a written mileage guarantee from us. Hundreds of First Tires with original serial numbers all wrapped as they left the factory, also in this sale.

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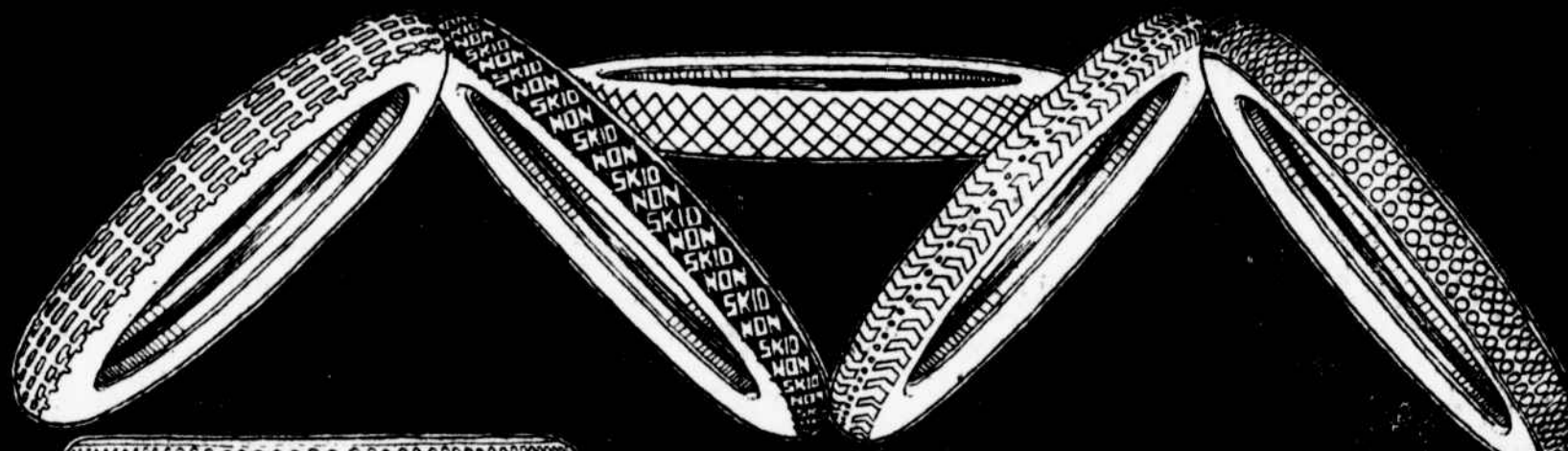
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SALE EXTENDED FOR FIVE DAYS

TIRES

Our recent sale has been such a success and so many of our good customers and friends have expressed their disappointment over missing this great money-saving opportunity, that we are going to extend it thru the 5th of July, starting today.

Every Tire and Tube in the House Reduced
Buy TODAY For That Trip
Over the Fourth—BUY NOW

We sell such tires as Goodrich, United States, Firestone, McGraw, Mansfield, Batavia, America, Riverside, Good, ear and many other makes.

SOME OF OUR PRICES:

Brand	30x3	\$10.25	34x4	\$22.50	Mileage
	30x3½	\$13.25	36x4	\$30.00	Guaranteed
	32x3½	\$15.25	34x4½	\$28.90	
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	33x4	\$21.50	37x5	\$36.50	

We never did, do not, nor is it our desire to ever carry in stock or sell REBUILT, or GYP TIRES, or TIRES MADE TO SELL FOR A LOW PRICE.

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